

GENERAL DESIGN GUIDELINES

20-1 ALIGNMENT SHEET

- 1 SHOW CURVE DATA.
- 2 SHOW ALIGNMENT OF RAMPS, FREEWAY AND PARKING LOTS.

20-2 TYPICAL CROSS SECTIONS

- 1 SHOW TYPICAL CROSS SECTION FOR CAR PARKING.

20-3 TYPICAL CROSS SECTION

- 1 SHOW TYPICAL CROSS SECTION FOR TRUCK PARKING.

20-4 RAMP AND PARKING LOT CONSTRUCTION SHEET

- 1 SHOW PROPOSED PARKING LOT LAYOUT.
- 2 SHOW QUANTITIES THIS SHEET.
- 3 SHOW PARKING LOT REMOVAL HATCHING.

20-5 PARKING PROFILE SHEET

- 1 SHOW EXISTING AND PROPOSED PLAN GRADE PROFILES.

20-6 SITE LAYOUT REMOVAL SHEET

- 1 SHOW QUANTITIES THIS SHEET.
- 2 REMOVAL ITEMS FOR THE SITE ARE SHOWN ON THIS SHEET.

20-7 REST AREA SITE SHEET

- 1 SHOW QUANTITIES THIS SHEET - NOTE PARKING LOT CONSTRUCTION QUANTITIES SHOW ON SHEET 20-4.
- 2 SHOW PROPOSED SITE LAYOUT.

ADDITIONAL SHEETS REQUIRED FOR A REST AREA PACKAGE ARE:

- 1 TITLE SHEET
 - 2 NOTE SHEET
 - 3 LEGEND SHEET
 - 4 PLANS AS DETAILED:
(ALIGNMENT SHEET, TYPICAL CROSS SECTIONS, RAMP AND PARKING LOT SHEET, PROFILE SHEET, SITE LAYOUT REMOVAL AND SITE LAYOUT SHEET)
 - 5 PICNIC TABLE DETAILS
 - 6 SITE SHEET DETAILS
 - 7 SOIL BORINGS
 - 8 BUILDING PLANS
 - 9 BUILDING ELECTRICAL PLANS
 - 10 BUILDING VENTILATION PLANS
 - 11 SITE ELECTRICAL PLANS
 - 12 WATER SUPPLY AND SANITARY DISPOSAL PLANS
 - 13 PAVEMENT MARKINGS
 - 14 SPECIAL DETAILS
- FOR ADDITIONAL INFORMATION CONTACT DESIGN SUPPORT AREA - UTILITIES, ROADSIDE, DRAINAGE SECTION

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1

REF LINE "A"

STA 1+00.00, 30' LT =
STA 570+111.82 WB I-96

REF LINE "A"

STA 6+62.94 =
REF LINE "B" STA 20+00.00

REF LINE B STA 26+03.78 =
REF LINE A STA 13+93.02

REF LINE "A" CURVE DATA

Δ= 32° 45' 36" LT
D= 8° 11' 06"
R= 700.00'
T= 205.76'
L= 400.24'
E= 29.61
PC=2+15.96
PI=4+21.72
PT=6+16.20

REF LINE "A" CURVE DATA

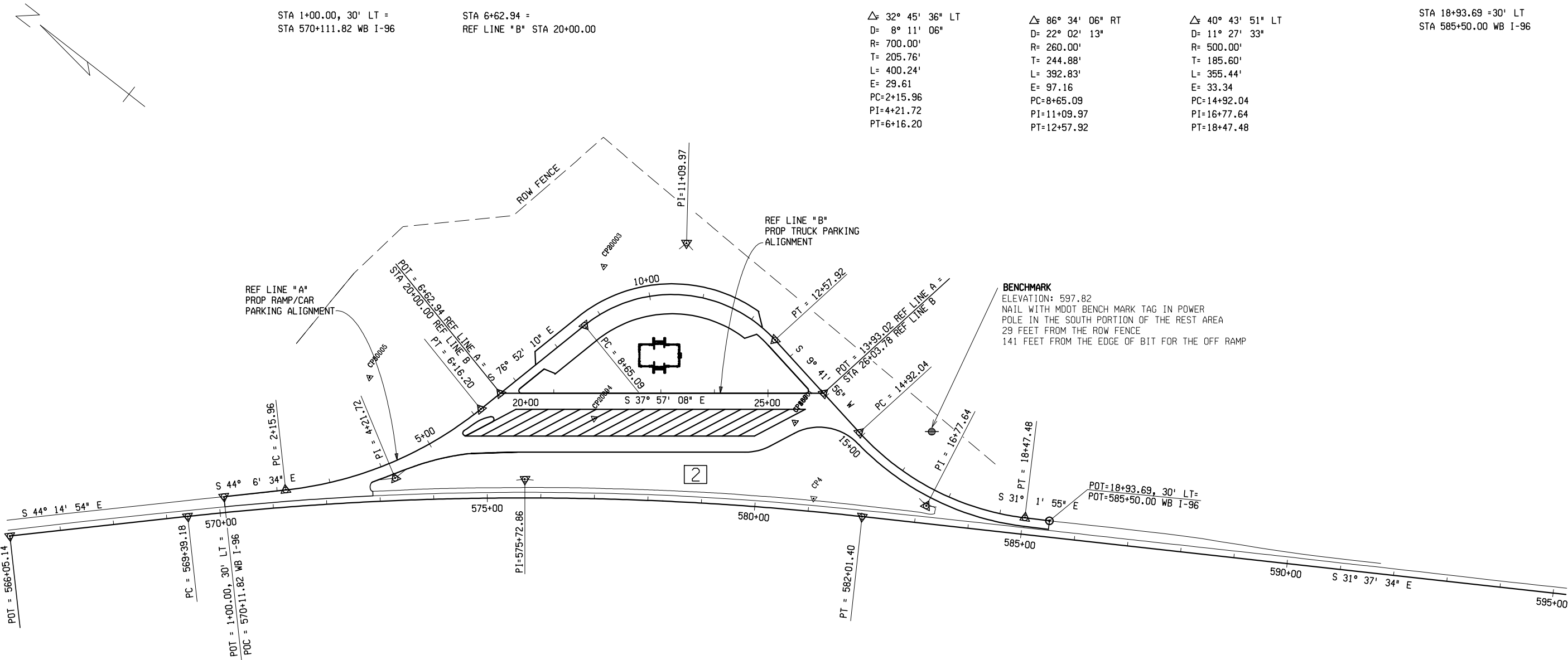
Δ= 86° 34' 06" RT
D= 22° 02' 13"
R= 260.00'
T= 244.88'
L= 392.83'
E= 97.16
PC=8+65.09
PI=11+09.97
PT=12+57.92

REF LINE "A" CURVE DATA

Δ= 40° 43' 51" LT
D= 11° 27' 33"
R= 500.00'
T= 185.60'
L= 355.44'
E= 33.34
PC=14+92.04
PI=16+77.64
PT=18+47.48

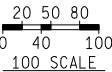
REF LINE "A"

STA 18+93.69 =30' LT
STA 585+50.00 WB I-96



WB I-96 CURVE DATA

Δ= 12° 37' 20" RT
D= 1° 0' 0"
R= 5729.58'
T= 633.68'
L= 1262.22'
E= 34.94
PC=569+39.18
PI=575+72.86
PT=582+01.40



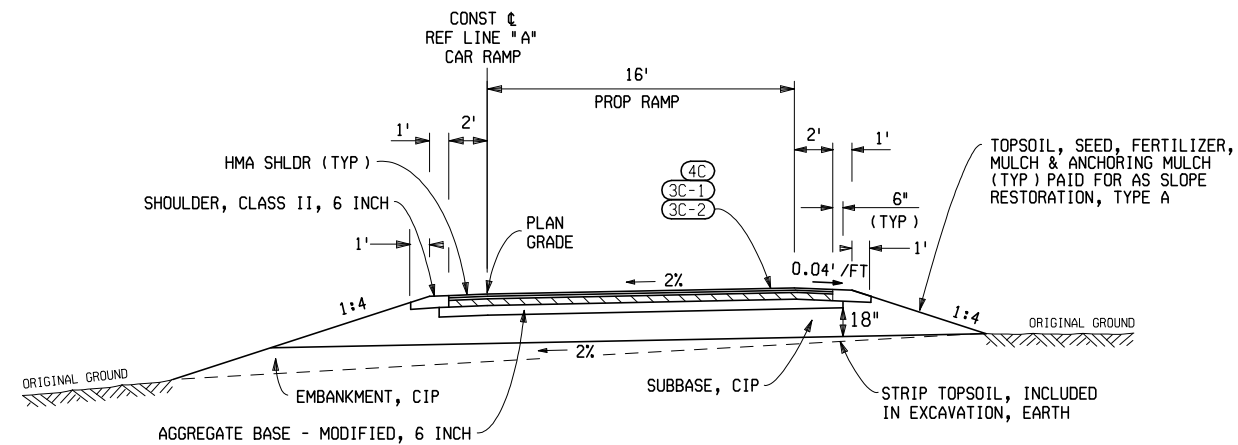
ALIGNMENT SHEET

20-1

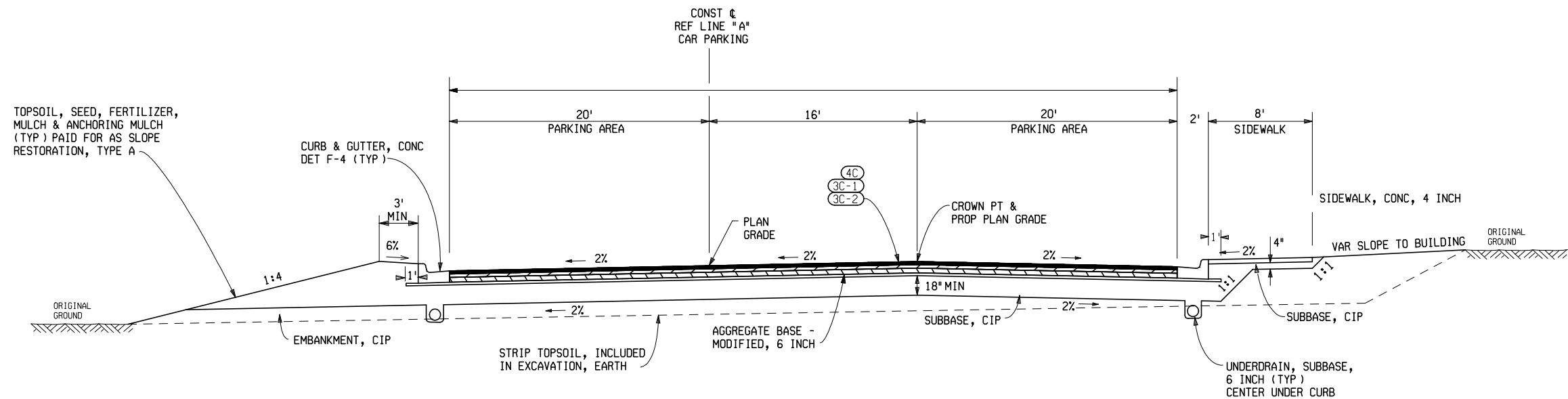
MDOT Michigan Department of Transportation					FRUITPORT REST AREA ALIGN SHEET				
DATE		CONT. SEC.		JOB NO.		DESIGN UNIT		SHEET NO.	
04/12/07								R.O.W CONST.	

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CAR RAMP
TYPICAL SECTION
TO APPLY:
STA 1+00.00 TO STA 7+50.00
STA 12+25.00 TO STA 18+93.69

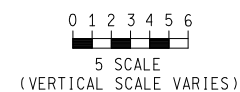


TYPICAL SECTION
TO APPLY (CAR PARKING):
STA 7+50.00 TO STA 12+25.00

BITUMINOUS APPLICATION ESTIMATE

IDENT NO.	ITEM	RATE PER SYD	PERFORMANCE GRADE	REMARKS
HMA 4C	HMA MIXTURE NO. 4C	170*	58-28	TOP COURSE AWI = 260
HMA 3C-1	HMA MIXTURE NO. 3C	220*	58-28	LEVELING COURSE
HMA 3C-2	HMA MIXTURE NO. 3C	330*	58-28	BASE COURSE
	* HMA BOND COAT	0.05-0.15 GAL		

*FOR INFORMATION ONLY



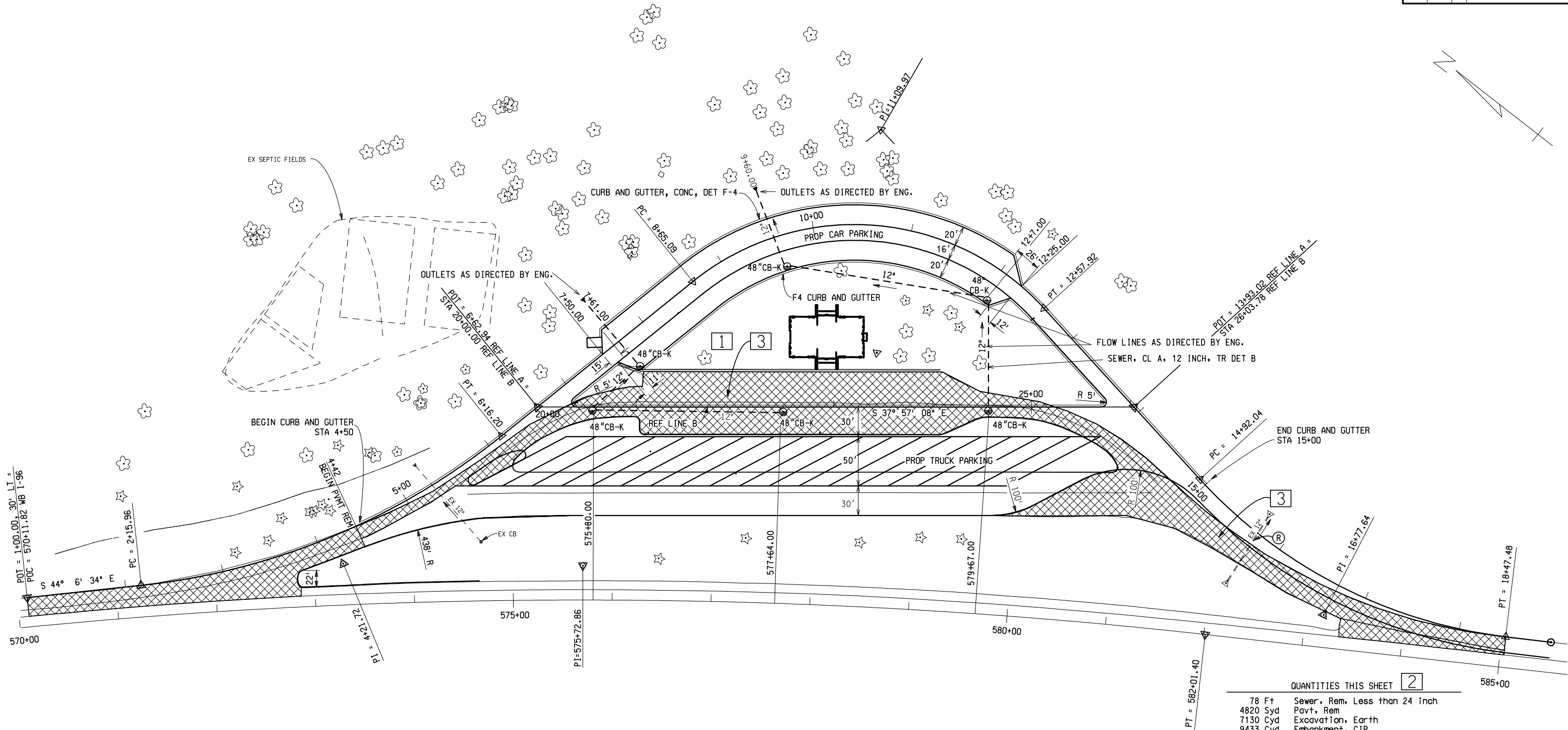
TYPICAL CROSS SECTIONS				
DATE	CONT. SEC.	JOB NO.	DESIGN UNIT	SHEET NO.
04/12/07				R.O.W CONST.

20-2

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T8N R12N

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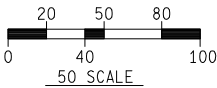
QUANTITIES THIS SHEET 2

78 Ft	Sewer, Rem, Less than 24 inch
4820 Syd	Pavt, Rem
7130 Cyd	Excavation, Earth
9433 Cyd	Embankment, CIP
7522 Cyd	Subbase, CIP
12381 Syd	Aggregate Base - Modified, 6 inch
3230 Ton	HMA, 3C
1000 Ton	HMA, 4C
244 Syd	Shoulder, CI I, 6 inch
6 Ea	Dr Structure, 48 inch dia *
3000 Lb	Dr Structure Cover
700 Ft	Sewer, CI A, 12 inch, Tr Det B
5 Ea	Sewer Tap, 12 inch
3100 Ft	Underdrain, Subbase, 4 inch
417 Ft	Underdrain Outlet, 4 inch
4 Ea	Culv End Section, Conc, 12 inch

* CATCH BASIN

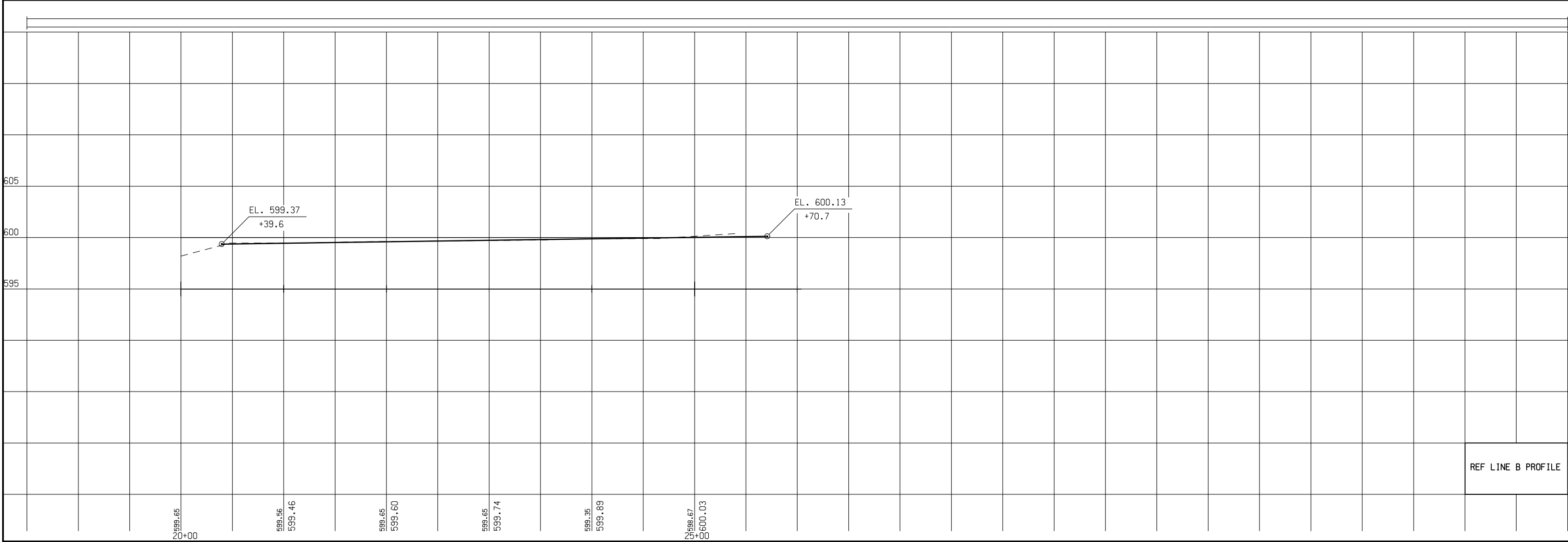
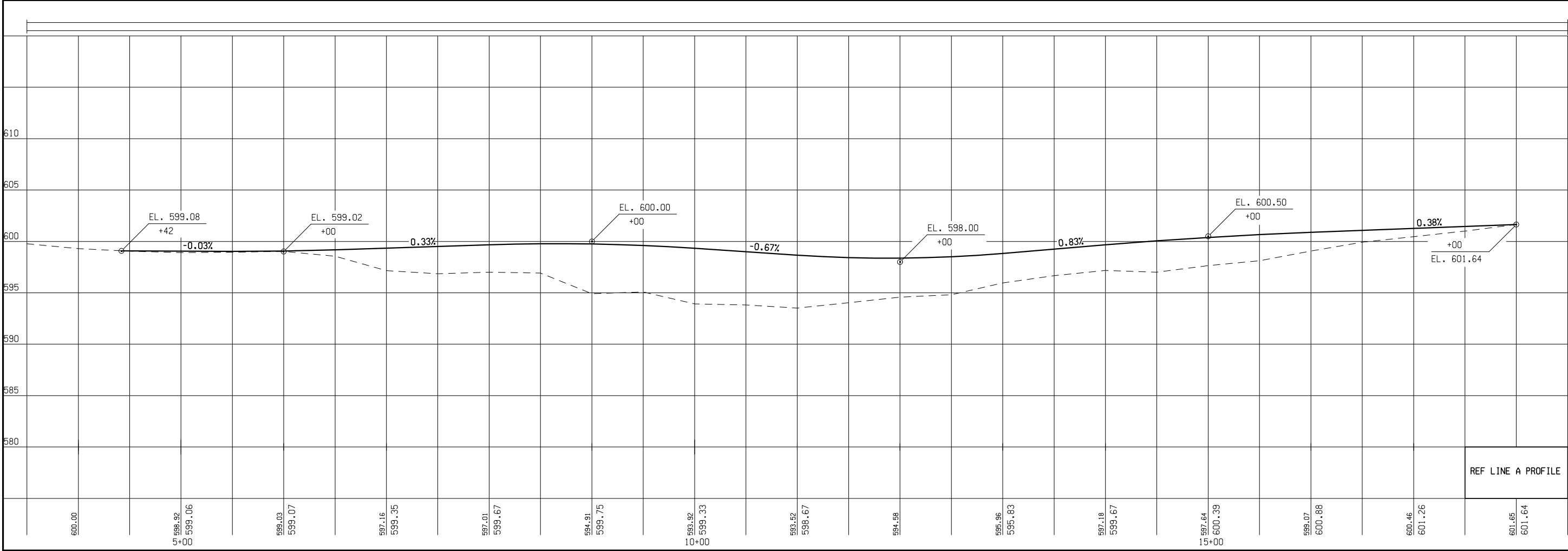
RAMP AND PARKING LOT CONSTRUCTION SHEET

20-4

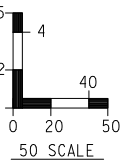


FRUITPORT REST AREA				
DATE	CONT. SEC.	JOB NO.	DESIGN UNIT	SHEET NO.
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EX CENTER LINE PROFILE
PROPOSED PLAN GRADE PROFILE

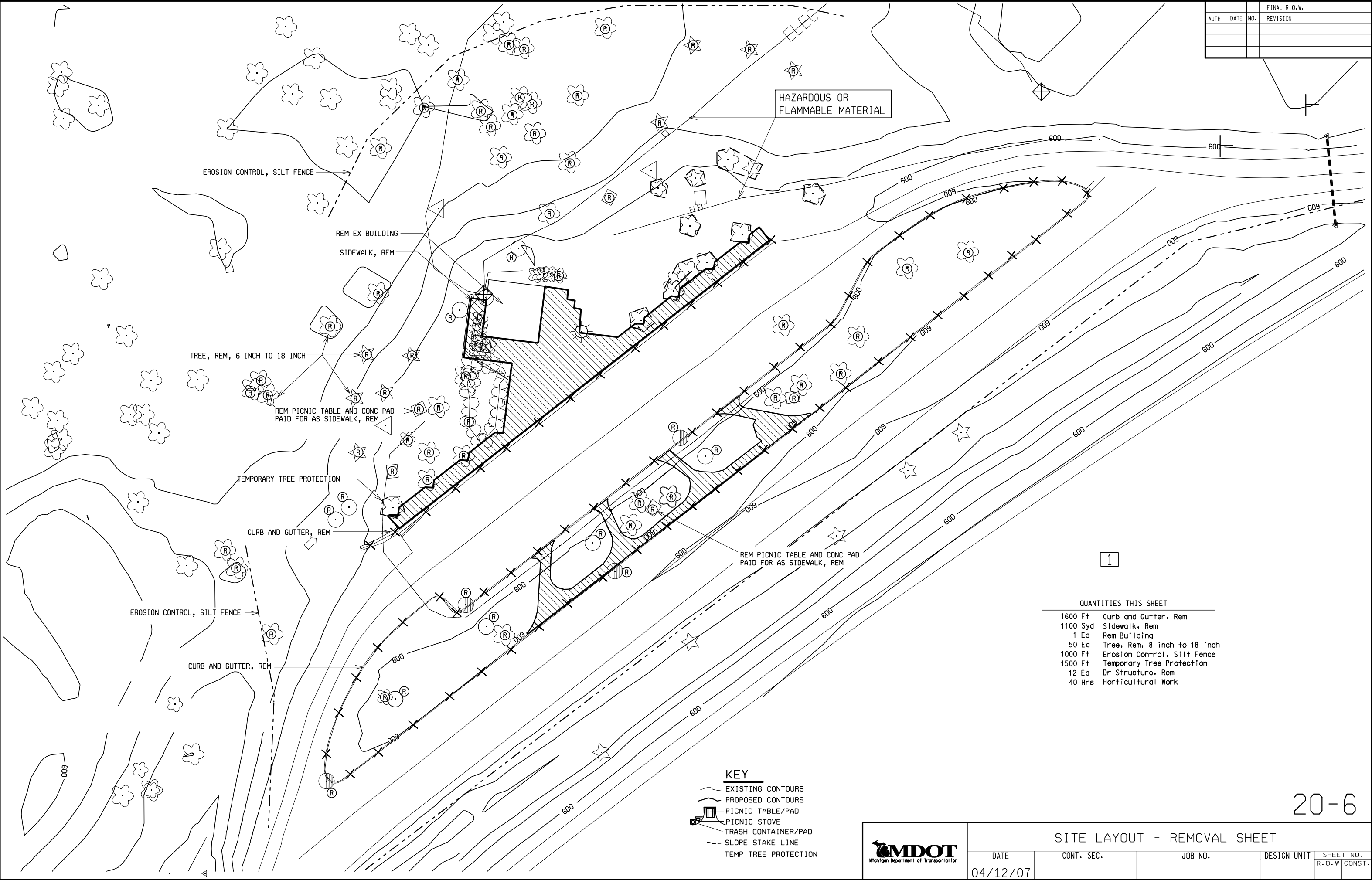


20-5

	PARKING PROFILES - FRUITPORT REST AREA		SHEET NO.	
	DATE	CONT. SEC.	JOB NO.	DESIGN UNIT
04/12/07				
CHECKED BY:		DATE:		WORKED ON BY:
FILE NAME:		R.O.W CONST.		

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